

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-4. (Canceled).

5. (Currently Amended): A purified or isolated nucleic acid ~~according to claim 1~~, wherein said nucleic acid encodes a polypeptide having at least 80% amino acid identity with the  $\beta$ 3 sub-unit polypeptide of the amino acid sequence of SEQ ID NO 2 over the entire length of SEQ ID NO 2, or a sequence complementary thereto.

6-9. (Canceled)

10. (Currently Amended): A purified or isolated nucleic acid according to claim 5 [1], wherein said nucleic acid has at least 90% nucleotide identity with the nucleotide sequence of SEQ ID NO 4 over the entire length of SEQ ID NO 4, or a sequence complementary thereto.

11. (Currently Amended): A purified or isolated nucleic acid according to claim 5 [1], wherein said nucleic acid comprises a polynucleotide having at least 90% nucleotide identity with the sequence beginning at the nucleotide located in position 376 and ending at the nucleotide in position 1023 of the nucleotide sequence of SEQ ID NO: 4 [SEQ ID N°4].

12. (Currently Amended): A purified or isolated nucleic acid according to claim 5 [1], wherein said nucleic acid comprises a sequence beginning at the nucleotide located in position 1 and ending at the nucleotide located in position 375 of the nucleotide sequence of SEQ ID NO: 4 [SEQ ID N°4].

13. (Currently Amended): A purified or isolated nucleic acid according to claim 5 [1], wherein said nucleic acid comprises a sequence beginning at the nucleotide located in

position 1024 and ending at the nucleotide located in position 1261 of the nucleotide sequence of SEQ ID NO: 4 [SEQ ID N°4].

14-16. (Canceled)

17. (Currently amended) A purified or isolated nucleic acid consisting of at least 10 consecutive nucleotides of a nucleic acid ~~according to claim 14, wherein said nucleic acid~~ is selected from the group consisting of ~~SEQ ID N° 35 to 43 or~~ a polynucleotide encoding a peptide of SEQ ID NO: 5, 7, 9, 11, 13, 15, 17, 19, 20, 22, 24, 25-32, or 46 ~~SEQ ID N° 5 to 32, SEQ ID N° 46 or SEQ ID N° 47.~~

18. (Canceled)

19. (Canceled).

20. (Currently Amended) A kit for the amplification of a  $\beta 3$  subunit nucleotide sequence, wherein said kit comprises :

a) a pair of amplification primers consisting of at least 10 consecutive nucleotides of a nucleic acid selected from the group consisting of a polynucleotide encoding a peptide of SEQ ID NO: 5, 7, 9, 11, 13, 15, 17, 19, 20, 22, 24, 25-32, or 46, or a sequence complementary thereto ~~which can hybridize to a  $\beta 3$  subunit nucleic acid according to any one of claims 1 to 17, and~~

b) optionally, the reagents necessary for performing the amplification reaction.

21-23. (Canceled).

24. (Currently Amended) A kit for detecting the presence of a  $\beta 3$  subunit nucleotide sequence by a hybridization reaction ~~polynucleotide comprising a nucleic acid according to any one of claims 1 to 17,~~ wherein said kit comprises :

a) a nucleic acid probe or plurality of nucleic acid probes consisting of at least 10 consecutive nucleotides of a nucleic acid selected from the group consisting of a

polynucleotide encoding a peptide of SEQ ID NO: 5, 7, 9, 11, 13, 15, 17, 19, 20, 22, 24, 25-32, or 46, or a sequence complementary thereto ~~a nucleic acid probe or a plurality of nucleic acid probes which can hybridize, under stringent hybridization conditions, to a nucleotide sequence included in a nucleic acid according to any one of claims 1 to 16,~~  
wherein said hybridization reaction is conducted at 65°C in the presence of 6 x SSC buffer, 5 x Denhardt's solution, 0.5 % SDS and 100 µg/ml of salmon sperm DNA;

b) optionally, the reagents necessary to perform the hybridization reaction.

25. (Original): The kit of claim 24, wherein the nucleic acid probe or the plurality of nucleic acid probes are immobilized on a substrate.

26. (Original): The kit of claim 24, wherein the nucleic acid probe or the plurality of nucleic acid probes are labeled with a detectable molecule.

27. (Currently Amended) A recombinant vector comprising a nucleic acid according to any one of claims [1 to 17] 5, 10, 11, 12, or 13.

28. (Currently Amended) A recombinant host cell comprising a nucleic acid according to any one of claims [1 to 17] 5, 10, 11, 12, or 13.

29-38. (Canceled)

39. (New): A purified or isolated nucleic acid comprising a nucleic acid that encodes a polypeptide of SEQ ID NO 2.